APPENDIX E

VARIANCE REPORTS

Shaw Environmental & Infrastructure, Inc.	Variance No: 3X_variance1 Linked w/NC No: Date of Issue: November 14, 2003 **Page _1 of 1_**
Project Name: Fort McClellan	**Project Number:** 796887

-Variance Report -

I.Description: **(by the person identifying the change)**
The site-specific work plan does not provide procedures for handling unknown items that do not appear to be chemical warfare material (CWM). This variance authorizes the changes presented in Section III (below) to the Site-Specific Work Plan and the Site Specific Safety & Health Plan (SSHP) for 3X Scrap Removal.

Identified by: Stephen Moran	**Date:** November 14, 2003

II. Justification for Variance:
There are no technical and health & safety procedures in the SFSP to address the handling of items or containers that do not appear to be CWM but whose contents are still unknown. These procedures will allow Shaw to place items, such as liquid-filled containers, into an overpack drum for future disposition. The items or containers will not be overpacked until after the Shaw Senior UXO Supervisor (SUXOS) and the U.S. Army Engineering and Support Center, Huntsville have both made determinations that the items do not appear to be CWM. Prior to disposal of any overpacked items, the contents will be categorized using a HAZCAT test kit and, if appropriate, "hot boxed" (i.e., placed in a container for 4 hours at 70°F and monitored with MINICAMS).

III. Applicable Document/Work Plan: **(by the person identifying the change)**
Final Site-Specific Work Plan and SSHP for 3X Scrap Removal. The following procedures will be performed in the event that an unknown item that does not appear to be CWM is encountered.

1. Work Plan, Section 2.3 – Excavation of 3X Material, page 2-3:
If an item or container is identified as not being CWM, however, the contents are still unknown, the item or container will be overpacked according to procedures outlined in Sections 3.0 and 4.0 of the SSHP (see below). Prior to disposal of any overpacked items, the contents will be categorized using a HAZCAT test kit and, if appropriate, "hot boxed" (i.e., placed in a container for 4 hours at 70°F and monitored with MINICAMS).

2. SSHP, Section 3.0 – Personnel Protective Equipment, page 7:
If excavated containers, bottles, jars, drums, etc are intact and are not presumed to contain chemical agent (as determined by review of the item(s) by the Shaw SUXOS and U.S. Army Engineering and Support Center, Huntsville), the item(s) may be placed in an overpack of appropriate size and capacity by two qualified personnel selected from the UXO team on site. There will be a buddy system in place necessitating a minimum of 2 UXO team members to execute the task. There will be two back-up personnel on standby to support the task effort if additional assistance is required. Both team personnel (Overpack Team and Standby Team) will wear Level B PPE.

The contents of the unknown item or container require identification and, until such information is obtained, the container will not be opened, shaken, or disturbed in any manner such that the contents may be released. Any container that is leaking, cracked, releasing liquid or gas, shall not be handled to inspect the contents. The overpack will be secured in an area removed from personnel and vehicle operations.

3. SSHP, Section 4.0 – Site Monitoring Plan, page 11:
Should a suspect CWM item(s) be encountered, the item is intact, and there is no indication of exposure risk based on sampling using MINICAMS monitoring or a PID, it will still be presumed that chemical agent may be present in the intact

container. It will still be necessary to initiate the required communications as specified in Attachment 6, and if the item (container, bottle, jar, drum, etc.) is intact (not leaking, cracked, releasing liquid or gas), and the review conducted by the Shaw SUXOS and the U.S. Army Engineering and Support Center, Huntsville indicates the item is not presumed to contain chemical agent, it may be placed in an overpack for secure storage until more positive identification can be safely made of the contents. The PPE required for the overpack personnel team is specified in Section 3.0.

Distribution List:
1. Jeanne Yacoub, Shaw Project Manager
2. Steve Moran, Shaw Technical Lead
3. Jack Gregston, Shaw Site Manager
4. Bill Hetrick, Shaw H&S
5. Darryl Stabile, US Army Corps of Engineers
6. Lee Coker, U.S. Army Corps of Engineers
7. Norm Honea, Shaw
8. Jorge Sanchez, Shaw QA/QC
9. Dan Copeland, CEHNC
10. Ben Hodges, Shaw SUXOS
11. Burney Chance, Shaw SSO
12. Bob Hickman, Shaw UXO Manager

- Signatures -

Requested by: Date

Approved by: Date

Project Manager Approval: Date

Huntsville Engineering & Support Center Approval: Date

Shaw H&S Approval: Date

Shaw QA Approval: Date

Shaw
Shaw Environmental & Infrastructure, Inc.

Variance No: 3X variance1
Linked w/NC No:
Date of Issue: November 14, 2003
Page 1 of 1

Project Name: Fort McClellan
Project Number: 796887

-Variance Report -

I. Description: (by the person identifying the change)
The site-specific work plan does not provide procedures for handling unknown items that do not appear to be chemical warfare material (CWM). This variance authorizes the changes presented in Section III (below) to the Site-Specific Work Plan and the Site Specific Safety & Health Plan (SSHP) for 3X Scrap Removal.

Identified by: Stephen Moran
Date: November 14, 2003

II. Justification for Variance:
There are no technical and health & safety procedures in the SFSP to address the handling of items or containers that do not appear to be CWM but whose contents are still unknown. These procedures will allow Shaw to place items, such as liquid-filled containers, into an overpack drum for future disposition. The items or containers will not be overpacked until after the Shaw Senior UXO Supervisor (SUXOS) and the U.S. Army Engineering and Support Center, Huntsville have both made determinations that the items do not appear to be CWM. Prior to disposal of any overpacked items, the contents will be categorized using a HAZCAT test kit and, if appropriate, "hot boxed" (i.e., placed in a container for 4 hours at 70°F and monitored with MINICAMS).

III. Applicable Document/Work Plan: (by the person identifying the change)
Final Site-Specific Work Plan and SSHP for 3X Scrap Removal. The following procedures will be performed in the event that an unknown item that does not appear to be CWM is encountered.

1. **Work Plan, Section 2.3 – Excavation of 3X Material, page 2-3:**
If an item or container is identified as not being CWM, however, the contents are still unknown, the item or container will be overpacked according to procedures outlined in Sections 3.0 and 4.0 of the SSHP (see below). Prior to disposal of any overpacked items, the contents will be categorized using a HAZCAT test kit and, if appropriate, "hot boxed" (i.e., placed in a container for 4 hours at 70°F and monitored with MINICAMS).

2. **SSHP, Section 3.0 – Personnel Protective Equipment, page 7:**
If encountered containers, bottles, jars, drums, etc are intact and are not presumed to contain chemical agent (as determined by review of the item(s) by the Shaw SUXOS and U.S. Army Engineering and Support Center, Huntsville), the item(s) may be placed in an overpack of appropriate size and capacity by two qualified personnel selected from the UXO team on site. There will be a buddy system in place necessitating a minimum of 2 UXO team members to execute the task. There will be two back-up personnel on standby to support the task effort if additional assistance is required. Both team personnel (Overpack Team and Standby Team) will wear Level B PPE.

The contents of the unknown item or container require identification and, until such information is obtained, the container will not be opened, shaken, or disturbed in any manner such that the contents may be released. Any container that is leaking, cracked, releasing liquid or gas, shall not be handled to inspect the contents. The overpack will be secured in an area removed from personnel and vehicle operations.

3. **SSHP, Section 4.0 – Site Monitoring Plan, page 12:**
Should a suspect CWM item(s) be encountered, the item is intact, and there is no indication of exposure risk based on sampling using MINICAMS monitoring or a PID, it will still be presumed that chemical agent may be present in the intact

container. It will still be necessary to initiate the required communications as specified in Attachment 6, and if the item (container, bottle, jar, drum, etc.) is intact (not leaking, cracked, releasing liquid or gas), and the review conducted by the Shaw SUXOS and the U.S. Army Engineering and Support Center, Huntsville indicates the item is not presumed to contain chemical agent, it may be placed in an overpack for secure storage until more positive identification can be safely made of the contents. The PPE required for the overpack personnel team is specified in Section 3.0.

Distribution List:
1. Jeanne Yacoub, Shaw Project Manager
2. Steve Moran, Shaw Technical Lead
3. Jack Greggton, Shaw Site Manager
4. Bill Herrick, Shaw H&S
5. Darryl Stabile, US Army Corps of Engineers
6. Lee Colter, U.S. Army Corps of Engineers
7. Norm Hoines, Shaw
8. Jorge Sanchez, Shaw QA/QC
9. Dan Copeland, CERNC
10. Ben Hodges, Shaw SUXOS
11. Barney Chaves, Shaw SSO
12. Bob Hickman, Shaw UXO Manager

Signatures	
Requested by:	11/7/03 Date
Approved by:	11/17/03 Date
Project Manager Approval:	11/17/03 Date
Huntsville Engineering & Support Center Approval:	Date
Shaw H&S Approval:	11/17/03 Date
Shaw QA Approval:	11/17/03 Date

Shaw Environmental & Infrastructure, Inc.	**Variance No:** 3X Variance No. 2 **Linked w/NC No:** **Date of Issue:** November 17, 2003 **Page 1 of 1**
Project Name: Fort McClellan	**Project Number:** 796887

-Variance Report -

I. Description: **(by the person identifying the change)**
The site-specific work plan does not provide procedures for the use of Level B PPE to access depot area agent monitoring station (DAAMS) sampling equipment (i.e., the DAAMS pump) after a MINICAMS ring-off has occurred in the exclusion zone. Should this occur the following procedure would be followed:

1) Retrieve the DAAMS pump, 2) replace the DAAMS pump with a second unit to collect confirmation samples, and 3) retrieve this second pump for confirmation of the original sample.

This variance authorizes the changes presented in Section III (below) to the Site-Specific Work Plan and the Site Specific Safety & Health Plan (SSHP) for 3X Scrap Removal.

Identified by: Stephen Moran	**Date:** November 17, 2003

II. Justification for Variance:
There are no technical and health & safety procedures in the 3X Work Plan to address the use of Level B PPE after a MINICAMS ring-off has occurred to retrieve DAAMS sampling equipment located inside the exclusion zone at the excavation site. These procedures will allow Shaw to don appropriate levels of personnel protection to accomplish air monitoring.

III. Applicable Document/Work Plan: **(by the person identifying the change)**
Final Site-Specific Work Plan for 3X Scrap Removal. The following procedures will be performed in the event that a ring-off occurs.

1. Work Plan, Section 2.4 – Monitoring and Identification of 3X Material, page 2-4:
If MINICAMS air monitoring results in two (2) consecutive alarms or ring-offs, two UXO team members will don Level B PPE and enter the exclusion zone to retrieve the DAAMS sampling pumps, replace the pump, then exit the exclusion zone. After 12 to 15 minutes the UXO techs – still in Level B PPE – will re-enter the exclusion zone to retrieve the second DAAMS pump. There will be a buddy system in place necessitating two UXO team members to execute the task. In addition, there will be two back-up personnel on standby to support the effort if additional assistance is required. Both team personnel (DAAMS Team and Standby Team) will wear Level B PPE.

2. SSHP, Section 3.0 – Personnel Protective Equipment, page 9:
Because of the toxicity and physical safety concerns associated with chemical agent materials, site personnel will not be permitted to continue work in areas which chemical agent materials have been identified unless work is performed in Level B personal protective equipment.

- NIOSH/MSHA-approved self-contained breathing apparatus or approved positive pressure airline respirator.
- Escape/egress air supply pack
- Saran-coated Tyvek taped at gloves, boots, and respirators
- Nitrile gloves (outer)
- Latex or lightweight nitrile gloves (double inner glove)
- Neoprene steel-toed boots
- Hard hat

- Hearing protection (when working near/adjacent to operating equipment).

3. SSHP, Attachment 5, Chemical Agent Monitoring Plan, Section 5.0 – Contingency Plan, page 9:
Following an alarm, all personnel will immediately evacuate the site. Two UXO technicians donning Level B PPE will re-enter the exclusion zone and re-position the end of the monitoring hose over the suspect CWM item. The UXO technicians will retrieve the DAAMS sampling pump. The retrieved pump will be taken to the UXO support team members located in the contamination reduction zone who will in turn take the pump to the monitoring personnel located in the support zone. After 12 to 15 minutes, the UXO team members, in Level B PPE, will re-enter the exclusion zone and retrieve the second DAAMS pump and transport this pump as described above.

Distribution List:
1. Jeanne Yacoub, Shaw Project Manager
2. Steve Moran, Shaw Technical Lead
3. Jack Gregston, Shaw Site Manager
4. Bill Hetrick, Shaw H&S
5. Darryl Stabile, US Army Corps of Engineers
6. Lee Coker, U.S. Army Corps of Engineers
7. Norm Honea, Shaw
8. Jorge Sanchez, Shaw QA/QC
9. Dan Copeland, CEHNC
10. Ben Hodges, Shaw SUXOS
11. Burney Chance, Shaw SSO
12. Bob Hickman, Shaw UXO Manager

- Signatures -

Requested by: Date

Approved by: Date

Project Manager Approval: Date

Huntsville Engineering & Support Center Approval: Date

Shaw H&S Approval: Date

Shaw QA Approval: Date

Shaw
Shaw Environmental & Infrastructure, Inc.

Variance No: 3X Variance No. 2
Linked w/NC No:
Date of Issue: November 17, 2003
Page 1 of 1

Project Name: Fort McClellan
Project Number: 796837

-Variance Report -

I. Description: (by the person identifying the change)
The site-specific work plan does not provide procedures for the use of Level B PPE to access depot area agent monitoring station (DAAMS) sampling equipment (i.e., the DAAMS pump) after a MINICAMS ring-off has occurred in the exclusion zone. Should this occur the following procedure would be followed:

1) Retrieve the DAAMS pump, 2) replace the DAAMS pump with a second unit to collect confirmation samples, and 3) retrieve this second pump for confirmation of the original sample.

This variance authorizes the changes presented in Section III (below) to the Site-Specific Work Plan and the Site Specific Safety & Health Plan (SSHP) for 3X Scrap Removal.

Identified by: Stephen Moran
Date: November 17, 2003

II. Justification for Variance:
There are no technical and health & safety procedures in the 3X Work Plan to address the use of Level B PPE after a MINICAMS ring-off has occurred to retrieve DAAMS sampling equipment located inside the exclusion zone at the excavation site. These procedures will allow Shaw to don appropriate levels of personnel protection to accomplish air monitoring.

III. Applicable Document/Work Plan: (by the person identifying the change)
Final Site-Specific Work Plan for 3X Scrap Removal. The following procedures will be performed in the event that a ring-off occurs.

1. **Work Plan, Section 2.4 – Monitoring and Identification of 3X Material, page 2-4:**
If MINICAMS air monitoring results in two (2) consecutive alarms or ring-offs, two UXO team members will don Level B PPE and enter the exclusion zone to retrieve the DAAMS sampling pumps, replace the pump, then exit the exclusion zone. After 12 to 15 minutes the UXO techs – still in Level B PPE – will re-enter the exclusion zone to retrieve the second DAAMS pump. There will be a buddy system in place necessitating two UXO team members to execute the task. In addition, there will be two back-up personnel on standby to support the effort if additional assistance is required. Both team personnel (DAAMS Team and Standby Team) will wear Level B PPE.

2. **SSHP, Section 3.0 – Personnel Protective Equipment, page 9:**
Because of the toxicity and physical safety concerns associated with chemical agent materials, site personnel will not be permitted to continue work in areas which chemical agent materials have been identified unless work is performed in Level B personal protective equipment.

- NIOSH/MSHA-approved self-contained breathing apparatus or approved positive pressure airline respirator.
- Escape/egress air supply pack
- Saran-coated Tyvek taped at gloves, boots, and respirator
- Nitrile gloves (outer)
- Latex or lightweight nitrile gloves (double inner glove)
- Neoprene steel-toed boots
- Hard hat

- Hearing protection (when working near/adjacent to operating equipment).

3. **SSHP, Attachment 5, Chemical Agent Monitoring Plan, Section 5.0 – Contingency Plan, page 9:** Following an alarm, all personnel will immediately evacuate the site. Two UXO technicians donning Level B PPE will re-enter the exclusion zone and re-position the end of the monitoring hose over the suspect CWM item. The UXO technicians will retrieve the DAAMS sampling pump. The retrieved pump will be taken to the UXO support team members located in the contamination reduction zone who will in turn take the pump to the monitoring personnel located in the support zone. After 12 to 15 minutes, the UXO team members, in Level B PPE, will re-enter the exclusion zone and retrieve the second DAAMS pump and transport this pump as described above.

Distribution List:
1. Jeanne Yacoub, Shaw Project Manager
2. Steve Moran, Shaw Technical Lead
3. Jack Gregston, Shaw Site Manager
4. Bill Herrick, Shaw H&S
5. Darryl Stabile, US Army Corps of Engineers
6. Lee Coker, U.S. Army Corps of Engineers
7. Norm Hones, Shaw
8. Jorge Sanchez, Shaw QA/QC
9. Dan Copeland, CEHNC
10. Ben Hodges, Shaw SUXOS
11. Buttney Chance, Shaw SSO
12. Bob Hickman, Shaw UXO Manager

Signatures	
Requested by:	Date 11/17/03
Approved by:	Date 11/17/03
Project Manager Approval:	Date 11/17/03
Huntsville Engineering & Support Center Approval:	Date
Shaw H&S Approval:	Date 11/17/03
Shaw QA Approval:	Date 11/18/03

Shaw Shaw Environmental & Infrastructure, Inc.	**Variance No:** 3X variance 3 **Linked w/NC No:** **Date of Issue:** February 5, 2004 Page 1 of 2
Project Name: Fort McClellan	**Project Number**: 796887

-Variance Report -

I. Description:

The ***Final Site-Specific Work Plan, 3X Scrap Removal, October 2003*** does not provide for the use of alternative methods of identifying inert OE material during excavation.

Identified by: Norm Honea and Ben Hodges	**Date**: January 30, 2004

II. Justification for Variance:

The Site-Specific Safety and Health Plan (SSHP) and the Site-Specific Unexploded Safety Plan Attachment (UXO Plan) state that "all work will be immediately halted" if "any OE material is encountered that cannot be positively identified as inert".

> *Only 3X scrap material (OE) is anticipated in the excavations. If any OE material is encountered that cannot be positively identified as inert; or if there is any indication of the presence of CWM materials, all work will be immediately halted, the site evacuated and the appropriate individuals notified (i.e., the site and project managers, the FTMC Base Environmental Coordinator, and the USACE representative).*

The verification that an OE item is positively inert is not easy in some cases and requires the utilization of techniques other than visual inspection. Depending on the ordnance encountered, X-ray analysis may be the only method available to determine if an item is hazardous (i.e., contains explosive fillers).

III. Applicable Document/Work Plan:

- SSHP, Section 4.0, Site Monitoring, page 11, paragraph 5
- UXO Plan, Section 1.0, General Information, page 1, paragraph 5.

Recommend that the reference quoted in the sections listed above be changed to read:

> *Only 3X scrap material (OE) is anticipated in the excavations. However, if any ordnance item is encountered that cannot be positively identified as inert, and is determined to be safe to move, it will be further investigated. Further investigation may include the use of X-ray techniques. Should X-ray reveal that an ordnance item is non-CWM, the item may be explosively opened to ensure that it does not contain any explosive fillers or components. If the item is suspected to contain an explosive hazard and believed to be unsafe to move, it will be left in place, work will be halted, the site evacuated, and the appropriate individuals notified.*
>
> *If there is any indication of the presence of CWM materials (such as a MINICAMS alarm), all work will be immediately halted, the site evacuated and the appropriate individuals notified (i.e., the site and project managers, the FTMC Base Environmental Coordinator, and the USACE representative).*

Distribution List:
1. Jeanne Yacoub, Shaw Project Manager
2. Steve Moran, Shaw Technical Lead
3. Jack Gregston, Shaw Site Manager
4. Bill Hetrick, Shaw H&S
5. Damon Young, US Army Corps of Engineers
6. Lee Coker, U.S. Army Corps of Engineers
7. Norm Honea, Shaw
8. Todd Davidson, Shaw QA/QC
9. Dan Copeland, CEHNC
10. Ben Hodges, Shaw SUXOS
11. Burney Chance, Shaw SSO
12. Bob Hickman, Shaw UXO Manager

- Signatures -

Requested by:
Date

Approved by:
Date

Project Manager Approval:
Date

Huntsville Engineering & Support Center Approval:
Date

Shaw H&S Approval:
Date

Shaw UXO Manager Approval:
Date

Shaw QA Approval:
Date

Shaw
Shaw Environmental & Infrastructure, Inc.

Variance No: 3X variance 3
Linked w/NC No:
Date of Issue: February 5, 2004
Page 1 of 2

Project Name: Fort McClellan
Project Number: 796887

-Variance Report-

I. Description:

The *Final Site-Specific Work Plan, 3X Scrap Removal, October 2003* does not provide for the use of alternative methods of identifying inert OE material during excavation.

Identified by: Norm Howes and Ben Hodges
Date: January 30, 2004

II. Justification for Variance:

The Site-Specific Safety and Health Plan (SSHP) and the Site-Specific Unexploded Safety Plan Attachment (UXO Plan) state that "all work will be immediately halted" if "any OE material is encountered that cannot be positively identified as inert".

> *Only 3X scrap material (OE) is anticipated in the excavations. If any OE material is encountered that cannot be positively identified as inert, or if there is any indication of the presence of CWM materials, all work will be immediately halted, the site evacuated and the appropriate individuals notified (i.e., the site and project managers, the FTMC Base Environmental Coordinator, and the USACE representative).*

The verification that an OE item is positively inert is not easy in some cases and requires the utilization of techniques other than visual inspection. Depending on the ordnance encountered, X-ray analysis may be the only method available to determine if an item is hazardous (i.e., contains explosive fillers).

III. Applicable Document/Work Plan:

- SSHP, Section 4.0, Site Monitoring, page 11, paragraph 5
- UXO Plan, Section 1.0, General Information, page 1, paragraph 5.

Recommend that the reference quoted in the sections listed above be changed to read:

> *Only 3X scrap material (OE) is anticipated in the excavations. However, if any ordnance item is encountered that cannot be positively identified as inert, and is determined to be safe to move, it will be further investigated. Further investigation may include the use of X-ray techniques. Should X-ray reveal that an ordnance item is non-CWM, the item may be explosively opened to ensure that it does not contain any explosive fillers or components. If the item is suspected to contain an explosive hazard and believed to be unsafe to move, it will be left in place, work will be halted, the site evacuated, and the appropriate individuals notified.*
>
> *If there is any indication of the presence of CWM materials (such as a MINICAMS alarm), all work will be immediately halted, the site evacuated and the appropriate individuals notified (i.e., the site and project managers, the FTMC Base Environmental Coordinator, and the USACE representative).*

FTMC
3X variance 3
Page 2 of 2

Distribution List:
1. Jessica Yarosh, Shaw Project Manager
2. Steve Moran, Shaw Technical Lead
3. Jack Gregston, Shaw Site Manager
4. Bill Hetrick, Shaw H&S
5. Damon Young, US Army Corps of Engineers
6. Lee Coker, U.S. Army Corps of Engineers
7. Norm Hayes, Shaw
8. Todd Davidson, Shaw QA/QC
9. Dan Copeland, CEHNC
10. Ben Hodges, Shaw SUXOS
11. Stanley Chance, Shaw SSO
12. Bob Hickman, Shaw UXO Manager

- Signatures -	
Requested by:	2/5/04 Date
Approved by:	2/9/04 Date
Project Manager Approval:	2/9/04 Date
Huntsville Engineering & Support Center Approval:	Date
Shaw H&S Approval:	2/5/04 Date
Shaw UXO Manager Approval:	2/5/04 Date
Shaw QA Approval:	2/5/2004 Date

Shaw Environmental & Infrastructure, Inc.	**Variance No:** 3X_variance 4
	Date of Issue: August 11, 2004
	Project Name: Fort McClellan
	Project Number: 796887

-Variance Report -

I. Description: (by the person identifying the change)
3X Variance No. 1 (dated November 14, 2003) states that items or containers recovered will not be overpacked until after the Shaw SUXOS and U.S. Army Engineering and Support Center, Huntsville (USAESCH) have both made determinations that the recovered items do not appear to be CWM.

Per telephonic conversation on August 11, 2004, Wilson Walters of USAESCH stated to Ben Hodges, Jorge Sanchez, and Jeff Tarr (Shaw); Damon Young (USACE-Mobile); and Gary Harvey (FTMC), that their organization does not desire to be contacted unless recovered items are suspected to be CWM. Additionally, USAESCH stated that Shaw should manage non-suspect CWM items or containers as HTRW and overpack the items following HTRW protocol.

This variance authorizes the changes presented in Section III (below) to the Site-Specific Work Plan and the Site Specific Safety & Health Plan (SSHP) for 3X Scrap Removal.

Identified by: Stephen Moran	**Date:** August 11, 2004

II. Justification for Variance:
USAESCH stated in a telephonic conversation on August 11, 2004 that their organization does not desire to be contacted by Shaw nor USACE-Mobile in the identification of unknown items unless recovered items are suspected to be CWM.

III. Applicable Document/Work Plan: (by the person identifying the change)
Final Site-Specific Work Plan and SSHP for 3X Scrap Removal. The following procedures will be performed in the event that an unknown item that does not appear to be CWM is encountered.

1. Work Plan, Section 2.3 – Excavation of 3X Material, page 2-3:
If an item or container is identified as not being CWM, however, the contents are still unknown, the item or container will be overpacked according to procedures outlined in Sections 3.0 and 4.0 of the SSHP (see below). Prior to disposal of any overpacked items, the contents will be categorized using a HAZCAT test kit and, if appropriate, "hot boxed" (i.e., placed in a container for 4 hours at 70°F and monitored with MINICAMS).

2. SSHP, Section 3.0 – Personnel Protective Equipment, page 7:
If excavated containers, bottles, jars, drums, etc are intact and are not presumed to contain chemical agent (as determined by review of the item(s) by the Shaw SUXOS, the item(s) may be placed in an overpack of appropriate size and capacity by two qualified personnel selected from the UXO team on site. There will be a buddy system in place necessitating a minimum of 2 UXO team members to execute the task. There will be two back-up personnel on standby to support the task effort if additional assistance is required. Both team personnel (Overpack Team and Standby Team) will wear Level B PPE.

The contents of the unknown item or container require identification and, until such information is obtained, the container will not be opened, shaken, or disturbed in any manner such that the contents may be released. Any container that is leaking, cracked, releasing liquid or gas, shall not be handled to inspect the contents. The overpack will be secured in an area removed from personnel and vehicle operations.

3. SSHP, Section 4.0 – Site Monitoring Plan, page 11:
Should a suspect CWM item(s) be encountered, the item is intact, and there is no indication of exposure risk based on sampling using MINICAMS monitoring or a PID, it will still be presumed that chemical agent may be present in the intact container. It will still be necessary to initiate the required communications as specified in Attachment 6, and if the item (container, bottle, jar, drum, etc.) is intact (not leaking, cracked, releasing liquid or gas), and the review conducted by the Shaw SUXOS indicates the item is not presumed to contain chemical agent, it may be placed in an overpack for secure storage until more positive identification can be safely made of the contents. The PPE required for the overpack personnel team is specified in Section 3.0.

Distribution List:
1. Jeanne Yacoub, Shaw Project Manager
2. Steve Moran, Shaw Technical Lead
3. Jeff Tarr, Shaw Site Manager
4. Doug Russell, Shaw H&S
5. Damon Young, US Army Corps of Engineers
6. Lee Coker, U.S. Army Corps of Engineers
7. Rob Madey, Shaw
8. Jorge Sanchez, Shaw QA/QC
9. Dan Copeland, CEHNC
10. Ben Hodges, Shaw SUXOS
11. Steve Hutchings, Shaw SSO
12. Bob Hickman, Shaw UXO Manager

Signatures

Requested by:	Date
Approved by:	8/11/04 Date
Project Manager Approval:	8/11/04 Date
Shaw H&S Approval:	8/11/04 Date
Shaw QA Approval:	8/11/04 Date
FTMC Installation Commander:	Date

Shaw™ Shaw Environmental & Infrastructure, Inc.	**Variance No:** 3X variance 5 **Linked w/NC No:** **Date of Issue:** September 1, 2004 Page 1 of 1
Project Name: Fort McClellan	**Project Number:** 796887.01220300

-Variance Report -

I. Description:

The ***Final Site-Specific Work Plan, Unexploded Ordnance Safety Plan, 3X Scrap Removal, October 2003*** does not identify who is authorized to enter the site from the 450-foot exclusion zone in section 2.2, only that two (2) individuals will be positioned at the 450-foot exclusion zone to prevent *unauthorized* personnel from entry. Technical Escort Unit (TEU) is requesting Shaw personnel perform repairs to the Interim Holding Facility (IHF) located inside the 450-foot exclusion zone, specifically the air conditioner, electrical, and removal of vegetation.

Identified by: Jeffrey J. Tarr, PG - Shaw Site Manager	**Date**: 9/01/04

II. Justification for Variance:

Maintenance and repair of the IHF inside the established 450-foot exclusion zone.

III. Applicable Document/Work Plan: Final Site Specific Unexploded Ordnance Construction Support 3X Scrap Removal Training Area T-38, Former Technical Escort Reaction Area, Parcel 186(6), October 2003

One UXO technician will escort the Shaw Electrician and clearing crew inside the 450-foot exclusion zone for maintenance repairs. Two Shaw personnel will remain at the 450-foot exclusion zone to prevent *unauthorized* personnel from entering the exclusion zone.

Distribution List:
1. Jeanne Yacoub, Shaw Project Manager
2. Steve Moran, Shaw Technical Lead
3. Jeff Tarr, Shaw Site Manager
4. Doug Russell, Shaw H&S
5. Damon Young, US Army Corps of Engineers
6. Lee Coker, U.S. Army Corps of Engineers
7. Jorge Sanchez, Shaw QA/QC
8. Dan Copeland, CEHNC
9. Ben Hodges, Shaw SUXOS

- Signatures -

Requested by: Date

Approved by: Date

Project Manager Approval: Date

Huntsville Engineering & Support Center Approval: Date

Shaw H&S Approval: Date

Shaw UXO Manager Approval: Date

Shaw QA Approval: Date

Shaw
Shaw Environmental & Infrastructure, Inc.

Variance No:	3X_variance 5 6 #18 10/1/04
Date of Issue:	September 23, 2004
Project Name:	Fort McClellan
Project Number:	796887

-Variance Report -

I. Description: (by the person identifying the change)
4.2-inch chemical, M2 and M2A1 projectile ordnance was recovered from T-38 anomalies 12 and 13 during 3X scrap removal activities. Some of the projectiles recovered have nose plugs installed to protect the threads and prevent foreign material from entering the burster tube cavity. The nose plugs also prevent visual inspection of the burster tube cavity. Therefore, a potential explosive hazard can not be eliminated through visual inspection.

Shaw policy states that remote demilitarization (demil) will be performed for all items recovered which cannot be visually certified. Because the burster tube cavity can not be inspected, a procedure is required to remotely demil the 4.2-inch projectiles that have nose plugs.

Identified by: Ben Hodges	**Date:** September 20, 2004

II. Justification for Variance:
The *Final Site-Specific Work Plan, 3X Scrap Removal* (Shaw, October 2003) and the *Final SSWP Addendum* (Shaw, July 2004) do not provide procedural guidance for the remote demil of 4.2-inch projectiles with nose plugs.

III. Applicable Document/Work Plan: (by the person identifying the change)

Insert after first paragraph of Section 2.5, Certification and Verification of 3X and OE Scrap (3X Scrap Removal Work Plan, Shaw, October 2003):

Shaw policy states that remote demilitarization (demil) will be performed for all recovered items that cannot be visually certified. Whenever visual inspection of burster tube cavities is not possible, a remote demilitarization will be performed using a band saw. Explosives are not anticipated because fuzes are not installed in the projectiles.

The proposed procedure for remote demil operations is in compliance with Shaw Policy and basic safe operational procedures. The procedure for remote demil operations using an electric metal cutting band saw with adjustable gravity feed and fluid lubrication/cooling is:

1. Set up exclusion zone based on calculated minimum separation distance (MSD). In this instance, the MSD has been calculated for the burster tube of a 4.2-inch projectile. This distance will be a minimum of 200-feet in all cases. (See attached MSD calculation sheet and figure displaying 574-ft MSD boundary for this occurrence).
2. Locate saws adjacent to the stockpiled MEC.
3. Clamp projectiles on saw vise.
4. Elevate blade 5 inches above projectile.
5. Set gravity feed on saw at 1 inch per 5 minutes.
6. Remove all personnel (saw operator and UXO personnel) from the exclusion zone.
7. Wait for saw to automatically turn off at completion of cutting. The burster tube cavity at the center of the projectile should be cut through in about 15 minutes. Wait an additional 15 minutes after the saw has turned off.
8. Return UXO personnel to the saw and visually examine projectile.

Insert into Table 4-1, Activity Hazard Analysis for Soil Screening, 3X Scrap Removal Work Plan Addendum (Shaw, July 2004):

Principal Steps	Potential Hazards	Recommended Controls
Demil Operation Using Band Saw	Injury or damage to operator or other personnel	Employees shall maintain the minimum separation distance (MSD) from the cutting operations according to the MSD calculation (a minimum of 200 feet). Band saw shall be used in strict adherence to manufacturers' recommendations. Crimping MEC in vice shall be performed with minimal force to maintain MEC in position for cutting. The band saw shall be de-energized while placing or removing MEC. Leather palm work gloves shall be used when replacing blades, handling cut MEC, and any item that poses the potential for cut or puncture injury.
	Electrocution	All extension cords shall be hard or extra hard duty rated. Extension cords shall be inspected prior to use for compromised insulation or missing conductors. GFCI's shall be used on all temporary wiring. Only qualified electricians shall perform electrical installations, troubleshooting, and/or maintenance.
	Contact with potentially contaminated material	Level D Modified PPE will be used. CWM screening with MINICAM monitoring shall be performed when cutting 4.2-inch rounds with nose plugs intact. CWM screening on MEC shall have been performed prior to cutting operation.
	Potential detonation of MEC	Employees shall maintain the minimum separation distance (MSD) from the cutting operations according to the MSD calculation (a minimum of 200 feet). No employee shall approach the band saw until it is confirmed the cutting process is compete and an additional 15 minute waiting period is achieved. Burster tubes exhibiting potential explosive residue shall not be handled until evaluated by the SUXOS and the UXOSO.

Insert into the table on page 4-3 located in Section 4.4 Personal Protective Equipment, 3X Scrap Removal Work Plan Addendum (Shaw, July 2004):

Task	Initial Level of PPE
Demil Operation Using Band Saw	Level D

Insert into Section 4.4 Personal Protective Equipment, 3X Scrap Removal Work Plan Addendum (Shaw, July 2004):

Level D. The minimal level of protection that will be required of Shaw personnel at the site will be Level D. The following equipment will be used for Level D protection:

- Coveralls or work clothing
- Leather work gloves (when necessary)
- Steel-toed safety boots
- Safety glasses
- Hard hat
- Hearing protection (when working near/adjacent to operating equipment).
- Latex or Nitrile gloves during groundwater sampling activities.

Distribution List:	**- Signatures -**
1. Jeanne Yacoub, Shaw Project Manager 2. Steve Moran, Shaw Technical Lead 3. Jeff Tarr, Shaw Site Manager 4. Doug Russell, Shaw H&S 5. Damon Young, US Army Corps of Engineers 6. Lee Coker, U.S. Army Corps of Engineers 7. Rob Madey, Shaw 8. Jorge Sanchez, Shaw QA/QC 9. Dan Copeland, CEHNC 10. Ben Hodges, Shaw SUXOS 11. Steve Hutchings, Shaw SSO 12. Bob Hickman, Shaw UXO Manager	**Requested by:** Date **Approved by:** Date **Project Manager Approval:** 9/23/04 Date **Shaw H&S Approval:** Date **Shaw QA Approval:** Date **Mobile OE Safety Officer:** Date